

Kansas Department of Health and Environment
West Nile Virus Infection
(West Nile Encephalitis, West Nile Fever, WNV)
Fact Sheet

What is West Nile Virus infection?

It is an infection caused by West Nile virus (WNV), which is spread to people by the bite of a mosquito infected with the virus. In people, the disease usually causes only a mild illness, but may cause encephalitis (swelling of the brain), meningitis (swelling of the lining of the brain), or even death in rare cases. The virus is named after the West Nile region of Uganda where the virus was first identified.

Is West Nile fever a new disease?

No. This virus was first identified in 1937 in Uganda, Africa. Prior to 1999, the virus had only been identified in Africa, Europe, the Middle East, and Asia. WNV was first detected in the United States in 1999, when 62 cases and seven deaths from WNV were reported in the New York City area.

Who gets West Nile virus?

Anyone can get infected with WNV if bitten by an infected mosquito. More severe infections are seen in the elderly and those with a weakened immune system.

How is West Nile Virus spread?

WNV is only spread by the bite of infected mosquitoes. Mosquitoes become infected by biting a bird that carries the virus. WNV is not spread from person to person or directly from birds to humans. WNV is not spread by person-to-person contact such as touching, kissing, or caring for someone who is infected.

Can you get West Nile Virus from other insects or ticks?

Infected mosquitoes are the primary source of the virus and caused the recent outbreaks in the United States. There is no evidence that other insects or ticks transmit WNV.

What are the symptoms of a West Nile virus infection?

Most people infected with WNV do not become ill. People with a mild infection may present with fever, headache, eye pain, muscle aches, joint pain, a rash on the trunk and swollen lymph nodes. In severe cases symptoms include extreme muscle weakness, inflammation of the brain (encephalitis), paralysis, and coma. In rare cases the infection may be fatal, particularly in the elderly and people with other medical conditions.

How soon after being bitten by a West Nile virus infected mosquito do symptoms occur?

Symptoms usually occur 3 to 15 days after a West Nile virus infected mosquito bites a person. Being bitten by an infected mosquito will not necessarily make you sick. Most people who are

infected with West Nile Virus have no symptoms or have only mild illness.

Should I be tested for West Nile Virus infection after being bitten by a mosquito?

No, most mosquitoes are not infected with WNV. WNV infections generally occur during warm weather months when mosquitoes are active. However, even in areas where WNV occurs, only a small proportion of the mosquitoes are likely to be infected.

What should I do if I think I have West Nile Virus encephalitis?

If you develop signs of encephalitis, with fever, muscle weakness, and confusion, you should seek medical care immediately.

Does past infection with this virus make a person immune?

Prior infection with West Nile virus is thought to provide lifelong immunity to the virus.

What is the treatment for West Nile virus infection?

There is no specific treatment for West Nile virus infection. A physician may prescribe medications to relieve the symptoms of the illness. In severe cases hospitalization may be required.

Is there a vaccine against West Nile Virus?

No. A vaccine to give to people for West Nile Virus does not exist at this time.

Can you get West Nile Virus from birds?

There is currently no evidence that West Nile Virus can be spread directly from an infected bird to people. However, dead birds can carry other diseases and should not be handled with bare hands. Use gloves to place dead birds into plastic bags and then placed into outdoor trash.

How can I report a sighting of dead bird(s) in my area?

Kansas has a toll free hotline for reporting dead birds: 1-866-452-7810 (532-2569 in Manhattan, KS).

How can I get a bird tested for West Nile Virus?

The hotline number, 1-866-452-7810 (532-2569 in Manhattan) includes detailed instructions on which birds will be tested in Kansas and how to arrange pick up of dead birds for testing. Not every dead bird reported or even picked up, will be tested.

What about horses or other animals?

Horses and other animals can be infected with WNV from the bite of an infected mosquito. Most horses infected with WNV recover, but there have been horses in the United States that have died of WNV. A vaccine against WNV is available for horses, your local veterinarian should be contacted. Although other animals may be infected with WNV, they may not show signs of the disease. There is no evidence that people can get WNV directly from animals or that animals can spread the disease to other animals.

What can be done to prevent an infection with West Nile virus?

Preventing mosquito bites will prevent West Nile virus infection. Personal protection and reducing mosquito populations will minimize the chance of developing WNV infection when it is present in an area.

Personal protective measures to reduce or prevent mosquito bites include:

- Limiting time spent outdoors at nightfall and dawn when mosquitoes are active
- Wearing long sleeve shirts and long pants when outdoors
- Using insect repellents containing DEET (N,N-diethyl-methyl-meta-toluamide) when outdoors. Follow the manufacturer's directions carefully.
- Screening your home to prevent mosquito entry.

Reducing mosquito populations will also reduce mosquito bites. In some communities, public funded surveillance and control programs reduce mosquito populations by eliminating mosquito breeding habitat, mosquito larvae or adults. You can also take measures in your own yard or on your property to eliminate standing, stagnant water where mosquitoes breed. Mosquitoes most likely to carry WNV will not breed in fresh water or running water.

Mosquitoes most likely to carry WNV breed in standing, stagnant water. Any container or area where water can collect is a potential breeding ground for mosquitoes, including unused tires, buckets, toys, clogged gutters, birdbaths, and livestock tanks. Turning out the water in containers or replacing/replenishing existing water every three days will interrupt the mosquito life cycle.

Where can I obtain more information on West Nile Virus?

You can visit the Kansas Department of Health and Environment (KDHE) Web site (www.kdhe.state.ks.us) for the latest information on West Nile virus prevention and control activities in Kansas. You can also call your local health department or the KDHE Epidemiologic Services (785, 296-3683).